

Permit Fact Sheet

General Information

Permit Number:	WI-0062979-04-0
Permittee Name:	Redtail Ridge Dairy
Address:	W3367 Ledge Rd
City/State/Zip:	Malone WI 53049
Discharge Location:	Sheboygan River and De Neveu Creek-Frontal Lake Winnebago Watersheds and groundwaters of the state

Animal Units					
Animal Type	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Dairy Calves (under 400 lbs.)	80	0	88	0	01/01/2027
Milking and Dry Cows	2240	2288	2555	2610	01/01/2027
Heifers (400 lbs. to 800 lbs.)	240	400	484	440	01/01/2027
Heifers (800 lbs. to 1200 lbs.)	440	400	264	440	01/01/2027
Total	3000	3088	3391	3490	

Facility Description

Redtail Ridge Dairy is an existing Concentrated Animal Feed Operations (CAFO) for dairy cattle located in the Town of Taycheedah in Fond du Lac County, Wisconsin. Redtail Ridge Dairy consists of two production sites, the Dairy Complex located at W3367 Ledge Road, Malone, WI 53049 and Heifer Complex located at W3388 Ledge Road, Malone, WI 53049. The Dairy Complex and Heifer Complex are located across Ledge Road from each other. Redtail Ridge Dairy is owned and operated by the Thome Family.

The Dairy Complex consists of 3 liquid waste storage facilities (WSF 1, WSF 2, and WSF 3), milking parlor, barns, and 2 stormwater ponds. The Heifer Complex consists of feed storage area with a vegetated treatment area, barns, shops, and 1 stormwater pond. The current herd size is 3,088 animal units (1,600 milking/dry cows, 800 heifers, and 40 calves). Approximately 20.7 million gallons of liquid manure and process wastewater, and 640 tons of solid manure is produced annually at the current herd size. Redtail Ridge Dairy has approximately 263 days of storage for liquid storage capacity. Redtail Ridge Dairy owns or rents 2,586 acres of cropland, of which approximately 2,506 acres are available for manure application.

Substantial Compliance Determination

After a file review and an inspection, Redtail Ridge Dairy is deemed to be in substantial compliance with their permit.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)	
001	WSF 1: Sample point 001 is for liquid waste storage facility 1 (WSF 1) located at the dairy site. WSF 1 is an above ground concrete (Pipping Tank) storage located east of WSF 2. The facility has a capacity (MOL Volume) of 4,427,085 gallons and was constructed in 2004. This storage accepts manure and process wastewater from the production area.	
002	WSF 2: Sample point 002 is for liquid waste storage facility 2 (WSF 2) located at the dairy site. WSF 2 is an above ground concrete (Pipping Tank) storage located west of WSF 1. The facility has a capacity (MOL Volume) of 9,140,627 gallons and was constructed in 2010. This storage accepts manure and process wastewater from the production area.	
003	WSF 3: Sample point 003 is for liquid waste storage facility 3 (WSF 3) located at the dairy site. WSF 3 is a concrete lined storage located south of the freestall barns and north of WSF 1. The facility has a capacity (MOL Volume) of 222,662 gallons and was constructed in 2002. This storage accepts manure and process wastewater from the production area.	
004	Settled Solid Manure: Sample point 004 is for and manure solids removed from bottom of liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	
005	Solid Manure: Sample point 005 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf hutch manure, maternity pen bedpack, heifer bedpack, steer manure, etc. Representative samples shall be taken for each manure source type.	
007	Feed Storage Area & Runoff Control System: Sample point 007 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at the heifer site. Proper operation and maintenance is required to ensure discharges of process wastewater to waters of the state do not occur. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the feed storage area runoff control system shall be submitted according to the Schedules section of the permit.	
008	Storm Water Runoff Control System: Sample point 008 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

The permittee currently has approximately 263 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance with ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 3,088 animal units, it is estimated that approximately 20,688,773 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 1,830 owned acres of cropland and has 756 acres controlled through contracts, rental agreements, or leases, or under manure agreements. Given the rotation commonly used by the permittee, 2,506 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number of practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process

wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permittee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq 12\%$ solids) on frozen or snow-covered ground during February and March.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as “Sampling Points.” For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

Sample Point Number: 001- WSF 1; 002- WSF 2; 003- WSF 3

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	
Phosphorus, Available		lb/1000gal	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.1 Changes from Previous Permit

Sample points 001 (WSF 1), 002 (WSF 2), and 003 (WSF 3) were edited to include a more accurate and up-to-date description.

1.1.2 Explanation of Operation and Management Requirements

Wastes shall be stored, and land applied according to permit and nutrient management requirements.

Sample Point Number: 004- Settled Solid Manure; 005- Solid Manure

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lbs/ton	Quarterly	Grab	
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.1.3 Changes from Previous Permit

Sample points 004 (Settled Solid Manure) and 005 (Solid Manure) were edited to include a more accurate and up-to-date description.

1.1.4 Explanation of Operation and Management Requirements

Wastes shall be stored, and land applied according to permit and nutrient management requirements.

Sample Point Number: 007- Feed Storage & Runoff Controls and 008- Storm Water Runoff Controls

1.1.5 Changes from Previous Permit

Sample point 007 (Feed Storage Area & Runoff Control System) (was edited to include a more accurate and up-to-date description.

Sample point 008 (Stormwater Runoff Control System) was added to better encompass permit requirements.

1.1.6 Explanation of Operation and Management Requirements

The is no required sampling for the runoff controls. Rather, there is required inspection and routine maintenance that should be recorded on a monitoring and inspection form or calendar. A copy of the inspection records shall be submitted with the Annual Report.

2 Schedules

2.1 Annual Reports

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Report #1: Shall include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2024
Submit Annual Report #2: Shall include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
Submit Annual Report #3: Shall include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #4: Shall include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #5: Shall include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

2.2 Nutrient Management Plan

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	09/01/2023
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan by March 31st of each year. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	03/31/2024
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2025
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2026
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2027
Management Plan Annual Update #5: Submit an Annual Update to the Nutrient Management Plan.	03/31/2028
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.3 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	10/01/2023

2.4 Monitoring & Inspection Program

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	10/01/2023

2.5 Feed Storage Area Runoff Controls- Engineering Evaluation

This evaluation is for the runoff control system for the feed storage area.

Required Action	Due Date
Retain Qualified Engineering Expert: The permittee shall retain a qualified engineering expert to complete an engineering evaluation for the feed storage area runoff controls and report the name of the expert to the Department.	03/01/2024
Engineering Evaluation: Submit an engineering evaluation that includes a written description of the existing feed storage area and its adequacy to meet the conditions found in the Production Area Discharge Limitations subsection and NR 243.15, Wis. Adm. Code.	06/01/2024
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse conditions identified as part of the engineering evaluation for the feed storage area in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	12/01/2024
Corrections and Post Construction Documentation: Complete construction of improvements to permanently correct any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/01/2025

2.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	03/01/2028

2.7 Explanation of Schedules

Schedules are included in the permit to ensure compliance with s. NR 243, Wis. Admin. Code, requirements. Schedules for the following items have been incorporated into the permit:

The schedules contained in 2.1, 2.2, 2.3, 2.4, and 2.6 are standard permit schedules.

Schedules contained in 2.5 for engineering evaluations for feed storage area runoff controls 1 (sample point 007) are being required in accordance with s. NR 243.16.

Other Comments:

NA

Attachments:

NMP Conditional Approval Letter

Days of Storage Review Letter

Sample Point Map

Proposed Expiration Date:

August 31, 2028

Prepared By:

Victoria Ziegler Agricultural Runoff Management Specialist

Date: 6/13/2023



June 7th, 2023

Fond Du Lac County
Approval

Tyler Thome
Redtail Ridge Dairy
W3367 Ledge Rd
Malone, WI 53049

SUBJECT: Conditional Approval of Redtail Ridge Dairy Nutrient Management Plan, WPDES
Permit No. 0062979-04

Dear Tyler Thome:

After completing a review of Redtail Ridge Dairy 2023-2027 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with s. NR 243.14, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends Redtail Ridge Dairy review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Redtail Ridge Dairy may have:

- Soils that may have bedrock or groundwater within 24 inches of surface,
- Multiple setback areas due to streams, conduits to streams, grassed waterways, wetlands or wells, and
- Evidence of possible soil erosion/flow channels. Note: road ditches or other man-made channels may be considered flow channels or conduits to navigable water and may be subject to a SWQMA and setback.

Reviewing the NMP and checking fields for these features and soil conditions prior to manure applications will help Redtail Ridge Dairy maintain compliance with their WPDES permit and Ch. NR 243 requirements.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 3,000 animal units (1,600 milking & dry cows, 800 heifers, and 400 calves). 1) A planned herd size of 3,400 animal units (1,825 milking & dry cows, 880 heifers, and 440 calves) by 2027.
2. Manure generation and spreading records indicate your herd will annually generate approximately 20,688,773 gallons of manure and process wastewater and 640 tons of solid manure in the first year of the permit term. Once full expansion has been reached the farm will annually generate approximately 23,450,868 gallons of manure and process wastewater and 720 tons of solid manure by 2027.
3. The use of application restriction options 1, 2 & 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.

5. That Redtail Ridge Dairy currently has 2,586 acres (1,830 owned and 756 controlled through contracts, rental agreements, or leases, or under manure agreements) of which 2,506 are spreadable acres.
6. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to a 303(d) impaired water.
7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That 87 fields are tiled.

- BS1	- BS2-3	- BS6-7
- BS8	- C4	- C15
- C20	- C21	- C24
- C25	- C27	- C36
- C47	- C48	- DK
- HL1	- JT1	- JT2
- JT6	- JT8	- JT10
- JT12	- JT13	- JT14
- JT16	- JT18	- JT19
- JT20	- JT21	- JT23
- JT24	- JT27	- JT28
- JT29	- JT30	- JT33
- JT34	- JT45	- JT46
- JT50	- JT51	- JT52
- JT55	- JT57	- JT58
- JT59	- JT60	- JT61
- JT63	- JT65	- JT66
- JT67	- JT69	- JT70
- JT71	- JT72	- JT74
- JT75	- JT76	- JT77
- JT79	- JT81	- JT82
- JT83	- JT85	- JT87
- JT89	- LB	- M1
- M2	- M3	- M4
- MB1	- MB2	- MB3
- MB4	- MB5	- MB6
- MB7	- SH49	- SS1
- SS2	- TH1	- TH2
- TJ1	- TJ2	- W1
9. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
10. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2023-2027 Redtail Ridge Dairy Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP, and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.
2. If existing fields yield a soil test results greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.
3. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, phosphorus, potassium, and sulfur.
4. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Redtail Ridge Dairy may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = \text{NH}_4\text{-N} + [0.25 \times (\text{Total N} - \text{NH}_4\text{-N})]$$

5. Redtail Ridge Dairy shall record daily manure applications by using the 'Daily Log' as generated by Snap Plus. These forms shall be retained at the farm and provided to the department upon request.
6. Redtail Ridge Dairy shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using 'CAFO Annual Spreading Report' as generated by Snap Plus.

WINTER SPREADING

7. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.
8. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
 - JT63
 - SH49
9. Winter spreading of solid and liquid manure may not occur during the "high risk runoff period" pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.
10. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.
11. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

12. No headland stacking sites are approved.

MANURE & PROCESS WASTEWATER IRRIGATION

13. Irrigation of manure or process wastewater is prohibited.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

14. Manure generated by Redtail Ridge Dairy that is mechanically applied to the following approved fields meet planning requirements under NR243.143/151.075, Silurian bedrock performance standards. The following fields are required to meet all requirements under NR243.143/151.075, Silurian bedrock performance standards immediately following this approval.

- BS1	- BS2-3	- JT1
- JT2	- JT4	- JT6
- JT7	- JT8	- JT10
- JT12	- JT13	- JT16
- JT18	- JT19	- JT20
- JT21	- JT23	- JT24
- JT30	- JT38	- JT51
- JT52	- JT53	- JT55
- JT57	- JT70	- JT71
- JT72	- JT74	- JT75
- JT76	- JT77	- JT79
- JT81	- JT82	- JT83
- JT85	- JT87	- JT89
- LB	- TH1	- TH2

SUBMITAL AND RECORDKEEPING REQUIREMENTS

15. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 608-212-8460 or Ashley.Scheel@Wisconsin.gov.

Sincerely,



Ashley Scheel, CCA
WDNR Nutrient Management Plan Reviewer
Wisconsin Department of Natural Resources

cc: Victoria Ziegler, WDNR Agricultural Runoff Management Specialist (Victoria.Ziegler@Wisconsin.gov)
Danielle Block, WDNR Agricultural Runoff Management Specialist (Danielle.Block@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Rob Davis, WDNR CAFO Engineer (Robert.Davis@Wisconsin.gov)
Paul Tollard, Fond Du Lac County (Paul.Tollard@Fdlco.Wi.gov)
Tyler Thome, Redtail Ridge Dairy (rrdoffice@redtailridgedairy.com)
File



October 27, 2021

FILE REF: R-2021-0072
WPDES Permit #: WI-0062979

Tyler Thome
Redtail Ridge Dairy, LLC
W3367 Ledge Road
Malone, WI 53049

Subject: Days of Storage Review for Redtail Ridge Dairy, LLC in Section 34, T16N, R18E in Taycheedah Township, Fond du Lac County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Thome:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has completed its review of the calculation of days of storage submitted by Tyler Thome, owner of Redtail Ridge Dairy, on March 25, 2021 with revisions received through October 22, 2021.

The Department reviewed the submitted calculations in accordance with ss. NR 243.14(9) and NR 243.15(3)(i) to (k), Wis. Adm. Code. Under s. NR 243.17(3)(c), Wis. Adm. Code, the permittee shall demonstrate compliance with the 180-day design storage capacity requirement at specified times. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Days of Available Liquid Waste Storage: The submitted information states that Redtail Ridge Dairy, LLC has 263 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The current number of animal units provided for the calculation is 2,900. Redtail Ridge plans to expand by 100 animal units per year over the remaining 4 years of the permit term to reach 3,300 AUs by 2025. The liquid waste volumes are based on manure hauling logs. It should be noted that the gallons of manure applied in 2020 does not line up well with the other 4 years. This is due to a wet fall in 2019 when the pits were not able to be fully emptied. It is also due to 2020 being a year of higher than normal precipitation. The liquid waste volumes are based upon a collection period of 365 days.

Total Liquid Waste Storage:	15,316,166 gallons
Total 25-yr, 24-hr Precip. on Storage	411,717 gallons
Total Freeboard Vol.	1,097,909 gallons
Total MOL Liquid Waste Storage:	13,806,540 gallons

Based on hauling log data:

Year	Gallons Applied	Yearly AUs	Gallons/AU
2016	18,920,830 gallons	2,750	6,880
2017	17,821,186 gallons	2,855	6,242
2018	15,225,027 gallons	2,741	5,555
2019	16,209,072 gallons	2,813	5,762
2020	23,633,677 gallons	2,749	8,597
Average Gallons/AU			6,607
Volume for Current AU		19,161,079	

Should you have any questions, please contact Rob Davis, DNR Madison office or your regional CAFO Specialist.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES



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Redtail Ridge Dairy Sample Point Map

Sample Points – Production Area

- 001 WSF 1
- 002 WSF 2
- 003 WSF 3
- 007 Feed Storage Area

Sample Points – Facility Wide

- 004 Settle Solids
- 005 Solid Manure
- 008 Storm Water Runoff Control